

Patent PD-202109 Customer No. 020991

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Ernest C. Chen et al. :

Serial No.: 10/519,322 Filing Date: 12-23-2004

For: IMPROVING HIERARCHICAL

**8 PSK PERFORMANCE** 

Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, VA

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class

223/13/1450, on the date below.

mail in an envelope addressed to:

<u> Georgann S. Grunebach</u>

Date: July 19, 2006

Typed or printed name of person signing certificate

Group Art Unit: 2611

Examiner: ANH, Sam K.

## INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

The references cited on the enclosed form PTO/SB/08A may be relevant or material to the examination of the above-identified patent application and are, therefore, submitted in compliance with the duty of disclosure defined in 37 CFR 1.56. It is respectfully requested that the references be considered and made of record in the application identified above.

This statement should be considered because it is being submitted before the mailing of a first Office action on the merits under 37 C.F.R. §1.97(b)(3). Accordingly, it is submitted that no fee is due in this matter.

However, if it is determined that any appropriate fee is due, the Commissioner is hereby authorized to charge Deposit Account No. 50-0383 of Hughes Electronics Corporation, El Segundo, California.

This Information Disclosure Statement is not to be construed as a representation that a search has recently been made, that additional information material to the examination of this application does not exist, or that this citation constitutes prior art.

11

Serial No.	10/519,322	Page 2
	,	· ~g~ -

Respectfully submitted,

By: Sylvan

eorgann S. Grunebach, Reg. No. 33,179

The DIRECTV Group, Inc. RE/R11/A109 P. O. Box 956 El Segundo, CA 90245

Telephone No. (310) 964-4615

July 19, 2006

0	To Vo	
Substitute for form PTO/SB/08A AUG 0 2 200		plete if Known
INTERPRETATION PROPERTY	Haddication Number	10/519,322
STATEMENT BY APPLICANTS	Filing Date	12-23-2004
STATEMENT BY APPLICANT	First Named Inventor	Ernest C. Chen
	Art Unit	2611
	Examiner Name	ANH, Sam K.
Date: July 19, 2006		
Sheet 1 of 4	Attorney Docket Number	PD-202109

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number  Number-Kind Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-4,637,017	01-1987	Assal et al.	
		US-5,940,025	08-1999	Koehnke et al.	
		US-5,870,443	02-1999	Rahnema, Moe	
		US-2003/0138037	07-2003	Kaku et al.	
		US-2002/0158619	10-2002	Chen, Ernest C.	
		US-6,426,822	07-2002	Winter et al.	
		US-6,741,662	05-2004	Francos et al.	
		US-2004/0146296	07-2004	Gerszberg et al.	
		US-5,648,955	07-1997	Jensen et al.	
		US-4,860,315	08-1989	Hosoda et al.	
		US-4,654,863	03-1987	Belfield et al.	
		US-5,229,765	07-1993	Gardner, Wallace R.	
		US-5,285,480	02-1994	Chennakeshu et al.	
	1	US-6,934,314	08-2005	Harles et al.	
		US-4,993,047	02-1991	Moffat et al.	
		US-5,111,155	05-1992	Keate et al.	
, , , , , , , , , , , , , , , , , , , ,		US-6,307,435	10-2001	Nguyen et al.	
		US-5,970,098	10-1999	Herzberg, Hanan	
*		US-6,125,148	09-2000	Frodigh et al.	
		US-6,008,692	12-1999	Escartin, Marko	
		US-6,249,180	06-2001	Maalej et al.	
		US-5,581,229	12-1996	Hunt, Paul C.	
	-	US-6,366,309	04-2002	Siegle, Gert	
· · · · · ·	1	US-4,835,790	05-1989	Yoshida et al.	•
		US-5,317,599	05-1994	Obata	
		US-5,557,067	11-1996	Zimmerman	
		US-6,021,159	02-2000	Nakagawa	
		US-6,061,393	05-2000	Tsui et al.	
	· ·	US-5,963,845	10-1999	Floury et al.	
<del></del>		US-6,272,679	08-2001	Norin, John L.	
	1	US-6,212,360	04-2001	Fleming et al.	
	1	US-6,188,717	02-2001	Kaiser et al.	

Examiner Signature	Date Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

		8	
Substitute for form PTO/SB/08A	AUG 0 2 2006	<b>W</b> 1	plete if Known
INFORMATION DISCLOSU		Application Number	10/519,322
STATEMENT BY APPLICA	NIT & TRADENARY	Filing Date	12-23-2004
OTATEMENT BY ALTEROA	IVI MADE	First Named Inventor	Ernest C. Chen
	[	Art Unit	2611
		Examiner Name	ANH, Sam K.
Date: July 19, 2	2006		
Sheet 2 of 4		Attorney Docket Number	PD-202109

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Document Number  Number-Kind Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US-6,141,534	10-2000	Snell et al.		
		US-6,131,013	10-2000	Bergstrom et al.		
		US-6,084,919	07-2000	Kleider et al.		
		US-4,896,369	01-1990	Adams et al.		
, , , , , , , , , , , , , , , , , , , ,		US-6,892,068	04-2002	Karabinis et al.		
······		US-5,848,060	12-1998	Dent		
		US-5,555,257	09-1996	Dent		
		US-5,642,358	06-1997	Dent		
		US-5,199,047	03-1993	Koch, Wolfgang		
		US-5,088,110	02-1992	Bonnerot et al.		
		US-4,847,864	07-1989	Cupo, Robert L.		
	<u> </u>	US-4,709,374	11-1987	Farrow, Cecil W.		
		US-4,594,725	06-1986	Desperben et al.		
	İ	US-4,519,084	05-1985	Langseth, Rollin E.		
	1	US-4,416,015	11-1983	Gitlin, Richard D.		
,	1	US-4,384,355	05-1983	Werner, Jean-Jacques		
		US-4,213,095	07-1980	Falconer, David D.		
		US-RE 31,351	08-1983	Falconer, David D.		
		US-6,429,740	08-2002	Nguyen et al.		
		US-6,166,601	12-2000	Shalom et al.		
		US-5,966,048	10-1999	Thompson		
	<u> </u>	US-5,606,286	02-1997	Bains		
	1	US-5,221,908	06-1993	Katz et al.		
		US-4,918,708	04-1990	Pottinger et al.		
		US-4,878,030	10-1989	Vincze		
		US-4,670,789	06-1987	Plume		
		US-4,647,873	03-1987	Beckner et al.		
	†	US-4,628,507	12-1986	Otani		
		US-4,500,984	02-1985	Shimbo et al.		
	<b>†</b>	US-4,283,684	08-1981	Satoh		
		US-4,068,186	01-1978	Sato et al.		
	1	US-2001/0024479	09-2001	Samarasooriya		

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	(A)	1	
Substitute for form PTO/SB/08A	AUG 0 % 78006	Com	plete if Known
INFORMATION DISCLOS	WAF S	Application Number	10/519,322
STATEMENT BY APPLIC	ANTRADEMART	Filing Date	12-23-2004
INFORMATION DISCLOSURE STATEMENT BY APPLICANT TRADELING		First Named Inventor	Ernest C. Chen
		Art Unit	2611
		Examiner Name	ANH, Sam K.
Date: July 19	, 2006		
Sheet 3 of 4		Attorney Docket Number	PD-202109

	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
	<u></u>	Number-Kind Code	MM-DD-YYYY		or Relevant Figures Appear	
	1	UC 5 700 110	00.1000	Cohmidi at al	<u> </u>	
	<u></u>	US-5,732,113 US-5,793,818	03-1998	Schmidl et al. Claydon et al.		
		US-5,828,710	10-1998	Beale		
		US-6,018,556	01-2000	Janesch et al.		
		US-6,128,357	10-2000	Lu et al.		
		US-6,411,659	06-2002	Liu et al.		

Examiner Signature	Date Considered	

	60/		
Substitute for form PTO/SB/08A	<u> </u>	Com	plete if Known
INFORMATION DISCLOSURE,	_ <b>.</b> &Xp	plication Number	10/519,322
STATEMENT BY APPLICANT	TRADEMAR FIL	ing Date	12-23-2004
OTATEMENT BY AFFEIGANT	Fir	st Named Inventor	Ernest C. Chen
	Ar	t Unit	2611
	Ex	aminer Name	ANH, Sam K.
Date: July 19, 2006			
Sheet 4 of 4	At	torney Docket Number	PD-202109

U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages			
	Number-Kind Code MM-DD-YYYY or Relevant Figures Appear							

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.	Foreign Patent Document  Country Code-Number-Kind  Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Т		
		FR 2696295	04-1994	Jaspal, Singh Bharj				
		EP 0222076	08-1986	Ketterling et al.				
		JP 07-038615	02-1995	Yasushi, Sogabe				
		DE 3642213	12-1986	Lopau et al.				
		JP 5-252084	09-1993	Takenaka et al.				
		JP 5-114878	05-1993	Kazama et al.				
		JP 5-41683	02-1993	Matsudo et al.				
		JP 2-95033	04-1990	Yamamoto, Yoshihiko				
		JP 2-5631	01-1990	Oda, Hirobumi				
		JP 03139027	06-1991	Nippon Telegraph and Telephone Corporation				

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	, , , , , , , , , , , , , , , , , , ,		Т		
		WOLCOTT, TED J. ET AL.; "Uplink-Noise Limited Satellite Channels"; IEEE 1995; pages 717-721; XP-00580915			
		SESKAR, IVAN ET AL.; "Implementation Aspects for Successive Interface Cancellation in DS/CDMA Systems"; Wireless Networks; 1998; pages 447-452			
		Earth Station Technology; 1986; pages 404-412; XP-002248387			

Examiner Signature	Date Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.